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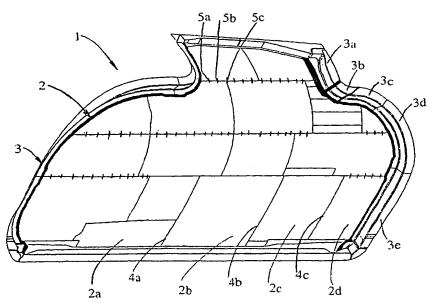
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Declarations under Rule 4.17:

as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE. AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES,

[Continued on next page]

(54) Title: METHOD FOR REINFORCING A CORE AND ARTICLE CONTAINING SAID CORE



(57) Abstract: This invention concerns a method for reinforcing a core (2) constructed of at least two core parts (2a, 2b, 2c, 2d), each of which exhibits a top side, a bottom side and walls joining the top side and bottom side. The core parts (2a, 2b, 2c, 2d) are arranged joined wall-to-wall with one another along a joint seam (4a, 4b, 4c) filled with glue, preferably in the form of a glue film. The method is characterized in that notches (5a, 5b, 5c) are realized in a number of places in the glue joint, which notches extent between the walls from the top side to the bottom side of the core parts so that the glue joint can be divided into pieces. The invention also encompasses an article fabricated in accordance with the aforementioned method.

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- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations
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A. CLASSIFICATION OF SUBJECT MATTER

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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

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C. DOCU	MENTS CONSIDERED TO BE RELEVANT	
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4910065 A (M.E. MCKINNEY), 20 March 1990 (20.03.90), column 2, line 40 - column 3, line 18, figures 1,2	1,5
		
A	US 5876652 A (M.E. RORABAUGH ET AL), 2 March 1999 (02.03.99), column 1, line 41 - line 58; column 2, line 10 - line 16; column 3, line 5 - line 17, figures 1-6	1,5
A	US 6268049 B1 (J.J. CHILDRESS), 31 July 2001 (31.07.01), column 3, line 26 - line 47, figure 1	1,5
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X	Further documents are listed in the continuation of Box	c C.	X See patent family annex.			
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C (Continu	lation). DOCUMENTS CONSIDERED TO BE RELEVANT	
Category*	Citation of document, with indication, where appropriate, of the relevant pass	ages Relevant to claim No.
A	GB 2267101 A (LJUBOMIR GNJATOVIC), 24 November 1993 (24.11.93), figures 1-5, abstract	1,5
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International application No.

PCT/SE 03/01353

Patent document cited in search report	. Publication date		Patent family member(s)	Publication date
US 4910065 A	20/03/90	AU BR DK EP JP NO NZ	2365488 A 8805281 A 575788 A 0311931 A 1214431 A 884592 A 226519 A	20/04/89 30/05/89 16/04/89 19/04/89 28/08/89 17/04/89 26/06/90
S 5876652 A	02/03/99	US	5869165 A	09/02/99
US 6268049 B1	31/07/01	US US AU US US WO	5958550 A 6027798 A 7718896 A 5736222 A 5935680 A 9716303 A	28/09/99 22/02/00 22/05/97 07/04/98 10/08/99 09/05/97
B 2267101 A	24/11/93	AU GB WO	3765893 A 9206927 D 9320300 A	08/11/93 00/00/00 14/10/93